In the Claims:

Please amend the claims as follows:

1-33 (cancelled)

34. (currently amended) A method for a cardiac analysis, the method comprising: acquiring an ECG-signal of a patient;

detecting at least one wave of the ECG-signal; and

calculating parameter values of said wave, wherein said wave is a P-wave excluding atrial extrasystoles,

whereupon the cardiac analysis is focused on dynamic changes of the <u>a</u> configuration of the P-wave, wherein substantially every detected P-wave <u>of the ECG signal of the patient</u> is compared to a reference P-wave of the ECG signal <u>of the patient</u> in a defined time period.

- 35. (previously amended) The method according to claim 34, wherein the cardiac analysis is also focused on dynamic changes of a PQ-segment.
- 36. (previously presented) The method according to claim 34, wherein the ECG-signal is a vectorcardiogram.
- 37. (currently amended) The method according to claim 34, wherein a beat between two R-peaks is examined, whereupon said beat is classified into groups depending on whether the

beat is having has a duration between the defined time period or the beat is having has a duration under the defined time period, whereupon both said beats are analyzed separately.

- 38. (previously presented) The method according to claim 34, wherein the P-wave is detected by a template method.
- 39. (previously presented) The method according to claim 34, wherein the P-wave is detected by a pattern recognition method.
- 40. (previously presented) The method according to claim 34, wherein the detected P-wave is stored in X, Y, Z leads.
- 41. (previously amended) The method according to claim 34, wherein the detected P-wave is averaged in the defined time period.
- 42. (previously amended) The method according to claim 41, wherein at least one averaged P-wave is used as an initial reference P-wave, where upcoming averaged P-waves are compared to the initial reference P-wave.
- 43. (previously presented) The method according to claim 34, wherein at least one loop of the P-wave is detected.
 - 44. (previously amended) The method according to claim 34, wherein the parameter

values of the P-wave in one-dimensional diagram are one or more of the following: a vector area, vector change area, P-area duplicity, PQ-vector magnitude, PQ-area and PQ change area.

- 45. (previously amended) The method according to claim 34, wherein the parameter values of the P-wave in two-dimensional diagram are one or more of the following: a vector loop area, vector change loop area and P loop area duplicity.
- 46. (currently amended) The method according to claim 34, wherein the parameter values of the P-wave in three-dimensional diagram are one or more of the following: a vector loop area, a vector change loop area, angles of the an azimuth, an elevation, change vector, a P-QRS vector as well as a vector magnitude, change vector magnitude.
- 47. (previously amended) The method according to claim 34, wherein the parameter values of the P-wave in magnitude environment are one or more of the following: a vector magnitude area, a vector change magnitude area difference and a vector magnitude.
- 48. (previously amended) The method according to claim 34, further comprising: calculating one or more of the following: a PQ-time, P-wave duration (P-dur), a length of the P-wave, a velocity of a P-wave vector loop.
- 49. (previously presented) The method according to claim 34, wherein the ECG-signal is acquired from a Frank system or a 12-lead ECG-arrangement.

50. (currently amended) The method according to claim 34, further comprising: registering electrical signals of the <u>a</u> heart <u>of the patient</u> in an independent data storage unit; and

acquiring the ECG signal from said data storage unit.

51. (currently amended) The method according to claim 34, wherein results of further comprising:

displaying the parameters are displayed parameter values in a trend curve.

52. (currently amended) A cardiac analysis system, comprising:

first means for acquiring the an ECG-signal of a patient;

second means for detecting at least one wave from the ECG-signal;

third means for calculating parameter values of said wave, wherein said wave is a P-wave excluding atrial extrasystoles, whereupon the cardiac analysis system is adapted to focus to on dynamic changes of the a configuration of the P-wave; and

means for comparing substantially every detected P-wave of the ECG signal of the patient to a reference P-wave of the ECG signal of the patient in a defined time period.

- 53. (previously amended) The system according to claim 52, wherein the system is further adapted to focus on dynamic changes of a PQ-segment.
- 54. (previously amended) The system according to claim 52, wherein the ECG-signal is in a form of a vectorcardiogram.

- 55. (currently amended) The system according to claim 52, wherein the system further adapted to measure a duration of a beat between two R-peaks, wherein the system is also configured to compare the beat to the defined time period and classified classify the beat into one of two groups depending on whether the duration is between the defined time period or under the defined time period, and wherein the system is also configured to analyze both groups separately.
- 56. (previously amended) The system according to claim 52, wherein the system is further adapted to detect the P-wave by a template method.
- 57. (previously amended) The system according to claim 52, wherein the system is further adapted to detect the P-wave by a pattern recognition method.
- 58. (previously amended) The system according to claim 52, wherein the system is further adapted to store the detected P-wave in X, Y, Z leads.
- 59. (previously amended) The system according to claim 52, wherein the system is further adapted to average the detected P-wave in the defined time period.
- 60. (previously amended) The system according to claim 59, wherein the system is adapted to use a first averaged P-wave as a reference P-wave and to compare upcoming averaged P-waves to the first averaged P-wave.

- 61. (previously amended) The system according to claim 52, wherein the system is further adapted to detect at least one loop of the P-wave.
- 62. (previously amended) The system according to claim 52, wherein the system is further adapted to acquire ECG-data from a Frank system or a 12-lead ECG-arrangement.
- 63. (currently amended) The system according to claim 52, being wherein the system is further adapted to acquire the ECG-signal from an independent data storage unit that has registered electrical signals of the <u>a</u> heart <u>of the patient</u>.
- 64. (currently amended) The system according to claim 52, wherein the system is further adapted to display results of the <u>calculated</u> parameter values calculated in <u>a</u> trend curve.
 - 65. (currently amended) A computer program product, comprising: a computer readable storage medium; and on which is stored a

method for a cardiac analysis, which computer program code comprises first computer instructions configured to acquire the method comprising acquiring an ECG-signal of a patient, second computer instructions configured to detect detecting at least one wave from the ECG-signal and third computer instructions configured to calculate calculating parameter values of said wave, wherein said wave is a P-wave excluding atrial extrasystoles, whereupon the computer program code has instructions for focusing to the wherein the cardiac analysis focuses on dynamic changes of the a configuration of said P-wave, wherein said computer program code

additionally comprises computer instructions configured to compare method further comprises

comparing substantially every detected P-wave of the ECG signal of the patient to a reference Pwave of the ECG signal of the patient in a defined time period.

66. (previously amended) The computer program product according to claim 65, wherein, the cardiac analysis is focused on dynamic changes of a PQ-segment.